

# **EXECUTIVE SUMMARY OF THE DRAFT ENVIRONMENTAL IMPACT ASSESSMENT REPORT**

**Prepared for**

**60 KLPD EXPANDABLE TO 120 KLPD DISTILLERY PLANT &  
COMPOSTING UNIT  
(M/s. Nirani Sugars Ltd)**

**At**

**Sy.Nos. 159/1, 18 & 19 of Malapur Village, Mudhol Taluk, Bagalkot  
District, Karnataka.**



**Prepared by**

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**CHAPTER-1.0**  
**PROJECT DESCRIPTION**

**1.1 INTRODUCTION**

**M/s Nirani Sugars Ltd** is an existing Sugar factory of 500 TCD and expanded the Sugar factory capacity to 5000 TCD in Stage I and proposes to achieve the ultimate capacity of 10,000 TCD in Stage II by the year 2010. It has also expanded bagasse based Co-generation Unit from 1.2 MW to 16 MW Capacity in the Ist stage and propose to expand further by 24 MW capacity in the II<sup>nd</sup> stage.

**M/s Nirani Sugars Ltd** proposes to establish a distillery of 60 KLPD expandable to 120 KLPD and also the ethanol plant of 60 KLPD expandable to 120 KLPD and 80 KLPD ENA plant. The industry has applied for TOR to the Ministry of Environment and Forest (MoEF) India and the MoEF has approved the TOR, which are enclosed. As per the TOR the industry has to provide effluent treatment plant based on anaerobic digestion followed by Concentration and Composting. This Proposed Project will be developed on a plot area of about 29 Acres.

**Table 1.1: Salient Features of the Proposed Project**

Sl.No	Items	Particulars
1	Objective of the Project	Proposed 60 KLPD Expandable to 120 KLPD Distillery Plant & Composting Unit
2	Promoters	M/s Nirani Sugars Ltd.
3	Total Investment	Rs. 44.6612 Crores
4	Project location	Sy.Nos. 159/1 18 & 19 of Malapur Village, Mudhol Taluk, Bagalkot District, Karnataka.
5	Extent of land	Total Land Area (Distillery + Composting) – 29 Acres. Total Land Area (Distillery Plant) – 8 Acres Total Land Area (Composting Unit) – 21 Acres.
6	Category of Project	The Proposed project falls under Category A [5(g) in the Schedule in EIA Notification 2006].
7	Man Power	60 Persons – Directly 100 Persons - Indirectly
8	Raw Materials	Molasses, Sulfuric acid, Nutrients N, P, Turkey Red Oil (TRO), etc.,
9	Water demand and Source	Surface water - 2000 cum/day. Ghataprabha River – 4.25 Km distance from the Site.
10	Power supply	Power and Steam shall be taken from sugar & Co-generation unit. Steam-384 MT/day Power – 1.50 MW
11	By products/ solid wastes	Municipal Waste from small colony, office sweepings & Garden trash Industrial Waste – Yeast Sludge
12	Latitude	16 <sup>0</sup> 21'30.8'' N
14	Longitude	75 <sup>0</sup> 15'56.9'' E

**1.2 Raw Materials and Utilities:**

M/s Nirani Sugars Ltd proposes to set up molasses based 60 KLPD Distillery expandable to 120 KLPD Capacity which requires following raw materials and utilities.

**Table 1.2 Raw Material Requirement**

Sl. No	Raw Material	Quantity/60 KLPD	Quantity/120 KLPD
1	Molasses	250 MT	500 MT
2	Sulphuric Acid	120 to 130 lit	240 to 260 lit
3	Nutrients N, P	36 Kg	72 Kg
4	Turkey Red Oil (TRO)	120 to 130 Kg	240 to 260 Kg
<b>Utilities</b>			
1	Power KW	700	1500
2	Steam MT	192	384
3	Water Cum	500	1000
4	Land (ha)	8	15

Thus all the resources are available and will be used economically and judiciously.

**1.3 Project Description:**

This is a simple three step process namely molasses preparation, fermentation and distillation.

It is proposed to adopt continuous fermentation technology for the process and the water requirement shall not exceed 2000 cum/day. The water shall be drawn from Ghatprabha River for which the industry has applied to the Irrigation Department for permission. The requirement of major raw material molasses is around 1,35,000 MT. The industry shall have its own molasses production of 80,000 MT and the remaining molasses shall be procured from other sugar plants. The steam and power shall be drawn from its own Co-generation plant, which is already established, and as such there is no additional requirement of steam and power.

**1.3.1 Process of Alcohol Production:**

Molasses is the chief raw material for production of Alcohol. Molasses contain about 50% total sugars, of which, 30 to 33% are cane sugar and the rest are reducing sugar. During the fermentation, yeast strains of the species *saccharomyces cerevisiae*, a living micro-organism belonging to class fungi converts sugar present in the molasses, such as sucrose or glucose to alcohol.

**1.3.2 Distillation:**

The next stage in the manufacture of alcohol is to separate alcohol from fermented wash and to concentrate it to 95% alcohol called as rectified spirit. For this purpose, method of distillation is employed. The distillation columns consists number of SIEVE plates where wash is boiled and alcoholic vapors are separated and concentrated on each place stage by stage.

**1.3.3. Integrated distillation and evaporation section:**

Technology offered (multi-Pressure): This technology is based on heat recovery principle.

The system comprises of 3 columns operating at different pressures and is designed to produce Rectified Spirit.

The columns in order of flow are as follows:

1. Analyser cum Degasifying (Column (operating under vacuum))
2. Aldehyde Column (operating under Vacuum)
3. Rectifier cum Exhaust Column (Operative under Pressure)

**1.3.4. Rectified Spirit Production:**

Fermented wash from the clarified wash tank is pumped to the fermented wash pre-heater and preheated to about 68-70°C by circulating hot spent wash on other side. Incoming spent wash temperature is 80-82°C and after exchanging heat with fermented wash out let lamp of spent washes remains at 35-40°C this hot fermented wash is then feed at the top of Degasifying column.

**1.3.5. Molecular Sieve Dehydration Section (MSDH):**

The Dehydration system is configured as a stand-alone unit and is capable of operating independently from any other process equipment, once properly connected to the utilities. The unit basically consists of two beds of desiccant, and an evaporation/regeneration column. While one bed is on line, the other is regenerated for an equal period. A computer-controlled control System

actuates the required valves operation, switching the flow from one bed to the other in a continuous operation, at the same time constantly monitoring all process, quality and safety parameters

The spent wash quantity is reduced by concentration through Multiple Effect evaporator after Biomethanation. The concentrated effluent shall be used for composting. The biogas generated from the bio-digester shall be used for power generation in the Co-generation Unit. This would also fetch additional revenue in terms of CDM. The concentrated spent wash after bio-methanation, which would be 600 cum per day shall be mixed with press mud and bagasse cillo and converted into manure. For 270 days of working the press mud required will be 80,000 MT and the bagasse cillo required would be 8,400 MT. The total area required for composting process is 12.50 Ha. However 15.0 Ha area is reserved for ETP. The compost that can be produced is around 70000 MT per annum. The compost shall have C/N ratio less than 17.0 and have Nitrogen 1.5 to 2.0%, Phosphorous 1.5 - 2.0 % and Potassium 3.5 – 4.0 %. Besides the compost has humus which will be highly beneficial for soil fertility.

By converting spent wash into manure the zero discharge concept as proposed by CPCB is being achieved and thus there would not be any liquid effluent from the distillery project, which is being established. There would not be any air pollution as the entire requirement of steam and power is being taken from Co-generation Unit.

## **CHAPTER-2.0**

### **PROJECT SITE DETAILS**

#### **2.1 Introduction**

The Distillery shall be located in Sy. No. 159/1 and Composting Unit in Sy. Nos. 18 & 19 of Malapur Village, Mudhol Taluk, Bagalkot District, Karnataka. The proposed land is 21 Acres for Composting Unit and 8 Acres for Distillery Plant. This is flat Land whereby Cutting-filling will be balanced and there will be No/Low Borrowing from Nature.

Within 10 km Influence Zone, there is no Tropical Forest, Biosphere Reserve, National Park, Wild Life sanctuary and Coral Formation Reserve. The River Ghataprabha is 4.25 Kms away from the proposed distillery site and the state highway is around 0.75 Kms.

#### **2.2 Rivers**

The important rivers are Malaprabha, Ghatprabha and Krishna in the district.

#### **2.3 Climate & Rainfall**

The climate of the district is hot and dry. Hot season starts from middle of the February to end of May. Post monsoon is during October and November. Cold season is from December to middle of February. The normal average rainfall is 560 mm and number of rainy days are 35.

**Table 2.1: Salient Features of the Proposed Project Site**

<b>Sl.No</b>	<b>Features</b>	<b>Particulars</b>
1	Location	Sy.Nos. 159/1 18 & 19 of Malapur Village, Mudhol Taluk, Bagalkot District, Karnataka State.
2	Present Land use	Industrial
3	Temp., Max and Min	27 <sup>0</sup> C to 42 <sup>0</sup> C and 14 <sup>0</sup> C to 26 <sup>0</sup> C
4	Average Humidity	65%
5	Annual Rainfall	560 mm (Average)
6	Soil Type	Black Cotton Soil
7	Topography	Plain terrain sloping towards Eastern side
8	Nearest Village	Malapur
9	Nearest Town	Mudhol
10	Nearest Industry	M/s Nirani Sugars Limited
11	Latitude	16 <sup>0</sup> 21'30.8'' N
12	Longitude	75 <sup>0</sup> 15'56.9'' E

**Table 2.2: Environmental Settings around the proposed project site  
(Within 10 Kms Radius)**

Sl.No	Description	Details
1	Nearest Highway	SH – 65 located at a distance of 0.75 Kms from the plant in Eastern Direction. SH – 18 is located at a distance of 1.5 Kms from the plant in the Southern Direction..
2	Nearest Water body	Ghataprabha River located at a distance of 4.25 Kms from the plant.
3	Nearest Village	Malapur Village is located at a distance of 2.0 Kms from the plant.
4	Nearest Taluk	Mudhol Taluk is located at a distance of 4.5 Kms from the plant.

**Table 2.3: Environmental Settings around the proposed project site**

Sl.No	Description	Details
1	Nearest Reservoir	Almatti Dam Located at a distance of 66 Kms from the plant in the Eastern direction.
2	Nearest Railway lines	Bagalkot – Bijapur Railway Line located at a distance of 62 Kms from the plant in Eastern Direction. Belgaum – Miraj Railway line located at a distance of 52 Kms from the plant in Western Direction.
3	Nearest Heritage site	Gol Gumbaz (Bijapur) located at a distance of 72 Kms from the plant in Northeast direction.
4	Nearest Highway	SH – 20 located at a distance of 26 Kms from the plant in Southern direction. SH – 65 located at a distance of 0.75 Kms from the plant in Eastern direction. NH – 218 located at a distance of 40 Kms from the plant in Eastern direction.
5	Nearest Water body	Ghataprabha River located at a distance of 4.25 Kms from the plant.
6	Nearest densely populated place	Mudhol Taluk located at a distance of 4.5 Kms from the plant.
7	Nearest High Level Canal	Almatti Dam Located at a distance of 66 Kms from the plant in the Eastern direction.

**CHAPTER - 3.0****ANTICIPATED ENVIRONMENTAL IMPACTS & MITIGATION MEASURES****Table 3.1: Construction Phase Impacts "Site Clearing"**

<b>Environmental Impacts</b>	<b>Mitigation</b>	<b>Remarks</b>
Soil erosion	<ul style="list-style-type: none"> <li>• Extent of vegetation removal will be minimized to prevent extent of soil erosion.</li> <li>• Vegetative cover will be reprojected at the earliest practicable time to minimize duration &amp; extent of soil erosion.</li> </ul>	Implementation responsibility: <ul style="list-style-type: none"> <li>• Contractor</li> <li>• Project Consultants</li> <li>• M/s Nirani Sugars Ltd.</li> </ul>
Noise generation	<ul style="list-style-type: none"> <li>• Selection of equipment with less noise generation to be used.</li> <li>• The earth moving equipment will be periodically checked and maintained for noise levels.</li> <li>• The workers will be provided with adequate PPE such as earplugs to reduce impact of high noise levels.</li> </ul>	Implementation responsibility: <ul style="list-style-type: none"> <li>• Contractor</li> <li>• Project Consultants</li> <li>• M/s Nirani Sugars Ltd.</li> </ul>
Dust generation	<ul style="list-style-type: none"> <li>• The site cleared will be periodically watered to reduce emission of dust particles.</li> <li>• The workers will be provided with PPE such as nose masks and goggles to reduce impact on health.</li> </ul>	Implementation responsibility: <ul style="list-style-type: none"> <li>• Contractor</li> <li>• Project Consultants</li> <li>• M/s Nirani Sugars Ltd.</li> </ul>

**Table 3.2: Construction Phase Impacts**  
**"Transportation of Construction Materials"**

<b>Environmental Impacts</b>	<b>Mitigation</b>	<b>Remarks</b>
Soil erosion	<ul style="list-style-type: none"> <li>• Extent of vegetation removal will be minimized to prevent extent of soil erosion.</li> <li>• Vegetative cover will be reprojected /rehabilitated at the earliest practicable time to minimize duration &amp; extent of soil erosion.</li> </ul>	Implementation responsibility: <ul style="list-style-type: none"> <li>• Contractor</li> <li>• Project Consultants</li> <li>• M/s Nirani Sugars Ltd.</li> </ul>
Noise generation	<ul style="list-style-type: none"> <li>• Selection of equipment with less noise generation to be used.</li> <li>• The earth moving equipment will be periodically checked and maintained for noise levels.</li> <li>• The workers will be provided with adequate PPE such as earplugs to reduce impact of high noise levels.</li> </ul>	Implementation responsibility: <ul style="list-style-type: none"> <li>• Contractor</li> <li>• Project Consultants</li> <li>• M/s Nirani Sugars Ltd.</li> </ul>
Dust generation	<ul style="list-style-type: none"> <li>• The site cleared will be periodically watered to reduce emission of dust particles.</li> <li>• The workers will be provided with PPE such as nose masks and goggles to reduce impact on health.</li> </ul>	Implementation responsibility: <ul style="list-style-type: none"> <li>• Contractor</li> <li>• Project Consultants</li> <li>• M/s Nirani Sugars Ltd.</li> </ul>

**Table 3.3: Construction Phase Impacts "Construction Activities"**

<b>Environmental Impacts</b>	<b>Mitigation</b>	<b>Remarks</b>
Noise generation	<ul style="list-style-type: none"> <li>• Personnel Protective Equipment (PPE) such as ear plugs and helmets will be provided for construction workers.</li> <li>• The working hours will be imposed on construction workers.</li> </ul>	Implementation responsibility: <ul style="list-style-type: none"> <li>• Contractor</li> <li>• Project Consultants</li> <li>• M/s Nirani Sugars Ltd.</li> </ul>
Dust generation	<ul style="list-style-type: none"> <li>• PPE in the form of nose masks will be provided for construction workers.</li> <li>• Use of water sprays to prevent the dust Contractor from being air borne.</li> </ul>	Implementation responsibility: <ul style="list-style-type: none"> <li>• Contractor</li> <li>• Project Consultants</li> <li>• M/s Nirani Sugars Ltd.</li> </ul>
Air Emissions from construction machinery	<ul style="list-style-type: none"> <li>• Periodic check and regular maintenance of construction machinery for emissions</li> <li>• Clean fuel will be used in equipments</li> </ul>	Implementation responsibility: <ul style="list-style-type: none"> <li>• Contractor</li> <li>• Project Consultants</li> <li>• M/s Nirani Sugars Ltd.</li> </ul>

**Table 3.4: Environmental Impacts - Operational Phase**

Activity	Environmental Attributes	Cause	Impact characteristics			
			Nature	Duration	Reversibility	Significance
Afforestation / Green belt development	Ecology	Planting of trees	Direct Negative	Long - Term	Reversible	High positive impact
Emissions from Vehicular traffic	Air Quality (SPM, SO <sub>2</sub> , NO <sub>x</sub> , CO, HC)	Vehicle operation	Direct Negative	Long - Term	Reversible	vehicle maintenance will be performed.
	Noise levels	Noise generation from vehicles	Direct Negative	Short-term	Reversible	Low, with periodical maintenance of vehicles
Socio- economic	Employment generation	Direct and indirect employment	Direct Negative	Long - Term	Irreversible	High, new opportunities of steady income for many families
	Quality of life	In-flow of funds in the region/nation	Direct Negative	Long - Term	Irreversible	High, the project will generate employment
Solid waste disposal	Land and soil	Generation of solid wastes	Direct Negative	Short-term	Reversible	Low, proper collection and disposal.
Wastewater discharge	Water quality	Generation of waste water	Direct Negative	Short-term	Reversible	High Proper treatment in ETP and utilization for irrigation.

DG set, operation	Air quality	Exhaust emissions	Direct Negative	Short-term	Reversible	Medium (DG set is only a standby).
	Noise levels	Noise generation	Direct Negative	Short-term	Reversible	Low, due to noise level protection measures (enclosures, PPE etc.)

**Table 3.5: Monitoring Schedule for Environmental Parameters for mitigation of anticipated Environmental Impacts**

Sl. No.	Particulars	Monitoring frequency	Duration of monitoring	Important parameters for monitoring
I	<b>Ambient Air Quality</b>			
1	Air Quality Analysis Within Premises	Once in a month	Grab	As per KSPCB requirement
I	<b>Water Quality</b>			
1	Ground Water Quality Analysis	Once in a month	Grab	As per KSPCB requirements
II	<b>Soil Quality</b>			
1	Soil Quality Analysis	Pre monsoon and post monsoon		As per KSPCB requirements
III	<b>Noise Quality</b>			
	<ul style="list-style-type: none"> <li>• Main Gate/Boundary</li> <li>• Process Area</li> <li>• D.G Set Room</li> <li>• Office areas</li> <li>• Others as recommended</li> </ul>	Once in a Month	24Hrs Monitoring	Noise levels in dB(A) Leq, Day time Leq, Night time

## **CHAPTER - 4.0**

### **ENVIRONMENTAL MONITORING PROGRAMME**

#### **4.1 Environmental Monitoring Plan**

Regular monitoring in a systematic and standardized manner helps in assessment of current environment and provides information on operational performance of pollution control facilities.

#### **4.2 Following are the Environmental aspects will be strictly considered in conducting routine Environmental Monitoring**

- **Monitoring of Ambient Air Quality** at plant boundary for fugitive emissions for SPM, RSPM, SO<sub>2</sub> and NO<sub>x</sub>. This will be carried out once in a month.
- **Work Zone Air Quality Monitoring** will be carried out in areas like Main Gate area, Process Section. This will be carried out once in a month.
- **Monitoring of ground water quality** will carried out once in a month.
- **Ambient Noise Level Monitoring** near the Main gate, Process House, Dispatch area, and plant boundary. This will be carried out once in a month during Day & Night times.
- **Monitoring of solid wastes** quantity and utilization potential.
- **Liquid Waste** – Spent wash

**CHAPTER – 5.0**  
**ADDITIONAL STUDY**

**5.1 Following are the additional study taken up with respect to the proposed project**

- ❖ Land use pattern of the proposed expansion project surrounding area determined using Satellite Imagery for a radius of 10 Kms which was procured from the Karnataka State Remote Sensing and Technology Utilization Centre, Bangalore.
- ❖ Mathematical modeling for calculating the dispersion of Air Pollutants.

**CHAPTER – 6.0**  
**PROJECT BENEFITS**

**6.1 Following are the benefits from the proposed expansion project**

- ❖ It provides employment opportunities directly for about 60 people & indirectly about 100 people.
- ❖ Socio – economic status of the project surroundings will improve.
- ❖ The resultant alcohol has various uses in chemical and pharmaceutical industries and also as Fuel and potable liquor.
- ❖ Composted manure is given to farmers in the subsidized rates.

## **CHAPTER – 7.0**

### **ENVIRONMENTAL MANAGEMENT PLAN**

#### **7.1 Environmental Management during Construction Stage**

1. During excavation and transportation on roads at the plant site, there is a scope for local fugitive dust emissions. Frequent water sprinkling in the vicinity of the construction activity will be done.
2. There is a likelihood of fugitive dust from the construction activity and material handling from the truck movement in the premises of the proposed plant. The industry will take up tree plantation program around the plant site.
3. It will be ensured that construction vehicle are properly maintained. The vehicle maintenance area will be located in such a manner, so as to prevent contamination of water sources by accidental spillage of oil.
4. Proper care will be taken for storage of LSD etc. Location will be identified for the storage of such flammable liquids, away from the main plant. The storage will be as per institutional safety standards.
5. The construction workers will be provided with sufficient and suitable toilet facilities to allow proper standards of hygiene.
6. Onsite workers using high noise equipment will be provided with noise protection devices. Noise prone activities will be restricted to daytime hours only.
7. Hazardous material will be stored in proper areas.
8. After completion of construction activities, the rubbish will be cleared and disposed to nearby authorized sites.

#### **7.2 Environmental Management during Operation Stage**

##### **7.2.1 Air Environment**

- There would not be any air pollution as the entire requirement of steam and power is being taken from existing Sugar / Co-Generation Unit.

### 7.2.2 Water Environment

- Source of water is from River Ghataprabha.
- Total 2000 cum/day will be used for proposed activity.
- The ETP will be constructed in two stages (i.e 600 cum for first stage and 1200 cum for second stage).
- Spent wash shall be treated based on Anaerobic Digestion principles for primary treatment and “Concentration” and “Composting” as secondary treatment.
- The Guidelines of CPCB for the design of "Biomethanation Plant" and “Composting Process” shall be followed.

#### Water Budget for Proposed Project

Sl.No	Details	Description	For 60 KLPD	For 120 KLPD
1	Rectified Spirit	Process Dilution And Steam	600	1200
2	Rectified Spirit	Cooling Water Make Up	400	800
3	Power Alcohol (Ethanol)	Dehydration	-6.0	-6.0
4	Domestic	Drinking and Sanitary use	+6.0	+6.0
			1000	2000

### 7.2.3 Noise Environment

- Personnel working near noisy areas will be provided with adequate personal protective equipment such as earplugs and earmuffs, use of which will be strictly enforced.
- Sophisticated and low noise generating equipments will be selected.
- Proper mounting of equipments and providing noise insulating enclosures or padding where practicable.
- The equipments will be maintained at all times to ensure permissible noise levels.

- Appropriate advanced silencers, acoustic barriers; vibration-reducing pads will be provided for all noise generating equipments.
- The sources of continuous noise generating equipment such as compressors, pumps etc will be designed to have noise level not exceeding 85-90dB (A).
- It would be ensured that there would not be any operator near the noise generating equipments on continuous basis.
- Boundary walls and dense green belt will be erected to act as acoustic barriers.
- Adequate and appropriate type of green belt would be developed in and around the proposed project site for noise mitigation in the area.
- Shock absorbing techniques will be adopted to reduce noise level.
- Acoustical walls and roofs are provided to buildings where such machineries are installed.
- Proper maintenance of machineries especially oiling and greasing of bearing and gears etc.
- Use of personnel protective to persons working near noise creating locations.
- Local native species will be planted for Green Belt Development.

#### **7.2.4 Solid Waste and Hazardous Waste generation**

The proposed Solid Waste and Hazardous waste generation from the plant is given below:

- Small Colony waste, Office sweepings, Garden trash about 2 cum/week. (used in Composting)
- Commercial Waste- Nil
- Yeast sludge is separated, dewatered and used in composting- 500 MT.
- Hazardous waste: Used Oil from D.G Set – 200 Lit/Annum.

#### **7.2.5 Greenbelt Development**

One third of total open area will be used for green belt. The species selected for greenbelt development shall fulfill the following specific requirements of the area:

- Tolerate to specific conditions.
- Shall have rapid growth rate.
- They shall rich canopy and shielding property.

- Large bio-mass and leaves to provide fodder and fuel.
- Ability to improve wastelands/barren areas.
- As far as possible shall be native in nature.

#### **7.2.6 Ecological Aspects**

The following measures proposed will have minimum impact on ecology of the project area:

- Zero discharge of wastewater from the proposed project in the operation stage.
- Continuing greening efforts in and around the project site.
- One third of total open area in the plant premises is proposed for greenbelt development.

#### **7.2.7 Aesthetics Aspects**

- Plant species of aesthetic value, fodder value, fruit bearing, and birds attracting tree will be planted. Hence it would be converted into a possible park for the nearby villages and project staff for recreation.

#### **7.2.8 Socio Economic Aspects**

- Local people of Malapur, Kulali Village will be employed to the maximum extent

#### **7.2.9 Storm Water Management**

- Storm water gutters will be constructed in the premises.
- Garland channels will be provided for collection of storm water.
- Storm water storage capacity will be provided for about 30% of the annual storm water collected from the factory premises.
- The rain water thus collected is used for greenery development in the factory premises.

#### **7.2.10 Post Project Environmental Monitoring**

M/s Nirani Sugars Ltd. will implement various productivity management programs in the plant to improve the work environment, effective house keeping and environment quality. All the necessary steps shall be taken in the plant to meet standards prescribed by the Karnataka State Pollution Control Board and Department of Ecology and Environment, Government of Karnataka.